Detroit Zoo opens crowdfunding campaign for AD system

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The Detroit Zoological Society and Michigan Economic Development Corp. recently announced a new crowdfunding campaign through Michigan-based crowdfunding platform Patronicity. The campaign will support an energy-producing biodigester that will harness the power of poo at the Detroit Zoo.

If the DZS attains its crowdfunding goal of \$55,000 by June 15, the MEDC will provide a \$55,000 matching grant.

"We are pleased to partner with the Detroit Zoo and support this eco-friendly, energy-saving project," said MEDC Community Development Director Katharine Czarnecki. "This campaign will allow residents, businesses and everyone who appreciates the Zoo and the positive impact it has on Metro Detroit to be a part of this innovative undertaking."

The biodigester will turn the 400 tons of animal manure generated annually at the Detroit Zoo, as well as other organic waste, into a methane-rich gas. This biogas will be used to help power the 18,000-square-foot Ruth Roby Glancy Animal Health Complex, saving the Zoo \$70,000 to \$80,000 a year in energy costs. The system will also convert manure into compost that will be used to fertilize animal habitats, gardens and public spaces throughout the 125-acre Zoo.

"The biodigester will turn one of our most abundant resources - manure - into energy, and represents a significant step on our green journey," said Ron Kagan, DZS executive director and CEO.

Construction on the biodigester will begin in the spring in the administrative area of the Detroit Zoo. Upon completion in the fall, it will be the first zoo-based system of its kind in the country.

Anaerobic digestion is a natural process where plant and animal materials - called biomass - are broken down by micro-organisms in the absence of air. The process begins when biomass is placed inside a sealed tank or digester. Naturally occurring micro-organisms digest the biomass, which releases a methane-rich gas that can be used to generate renewable heat and power - helping to

cut fossil fuel use and reduce greenhouse gas emissions. The remaining material is rich in nutrients, so it can be used as fertilizer.

The biodigester is just one of the many sustainability initiatives of the DZS Greenprint, a strategic plan to refine and improve daily practices and facilities, develop new policies and programs and improve green literacy in the community. In recognition of these continuous efforts in sustainability, the DZS was honored with the Green Award in 2014 by the Association of Zoos and Aquariums.

